

AIRPROX REPORT No 2010090

Date/Time: 8 Jul 2010 1612Z

Position: 5045N 00238W (5nm W GIBSO)

Airspace: LFIR (Class: G)

Reporting Ac Reported Ac

Type: DHC-8 A320

Operator: CAT CAT

Alt/FL: FL145↓ FL145↑

Weather: VMC CAVOK VMC CLOC

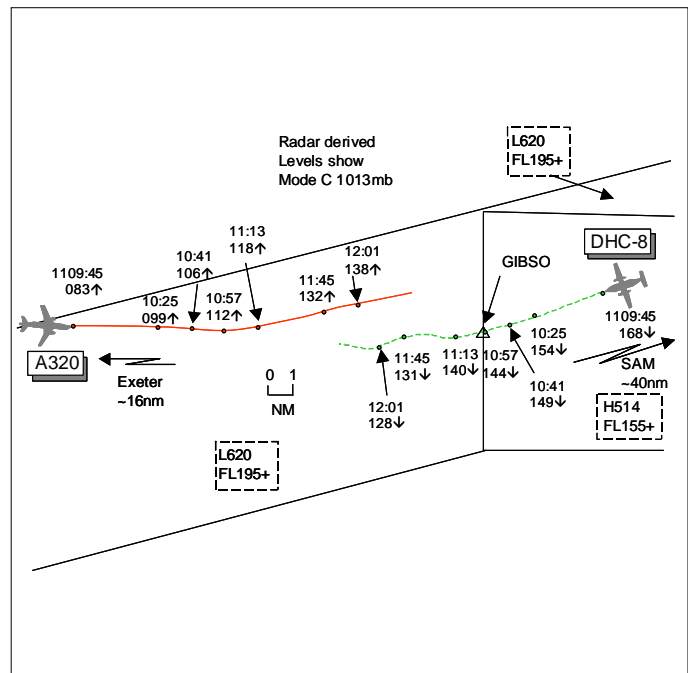
Visibility: 10km

Reported Separation:

1000ft V/2.5nm H NR

Recorded Separation:

1000ft V/1.9nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE DHC-8 PILOT reports inbound to Exeter IFR and in communication with London squawking 6260 with Modes S and C. Descending from FL180 to FL100 outside CAS in the area of GIBSO heading 270° at 340kt they were not under Western Radar cover. They saw proximate traffic on TCAS before seeing the A320 flying level, he thought, on their R in the opposite direction. As they descended through its level, a TCAS TA was generated; they turned L due S away from the A320 to avoid, estimating 1000ft vertical and 2.5nm horizontal separation at the CPA. They heard the A320 flight report a TCAS RA. He assessed the risk as low.

THE A320 PILOT reports outbound from Exeter IFR squawking an assigned code with Mode S and C. During the climb at 240kt towards GIBSO to FL160 they were handed over early to London, given a TS and informed of a descending ac leaving GIBSO for Exeter. They made a request to turn L to avoid the traffic and increase their track distance to GIBSO, as they were unable to make GIBSO level FL160 in accordance with their clearance owing to an increasing tailwind component. They picked up the descending ac on TCAS and visually, and saw that it would pass down their RHS. However a TCAS TA and then a brief RA - <1sec – was received and they carried out the RA actions.

THE S20T CONTROLLER reports the DHC-8 was an Exeter inbound who had been cleared to leave CAS; Exeter had accepted the flight at FL100. The A320 then became airborne from Exeter, cleared to join CAS at GIBSO at FL160. TI was passed to the DHC-8 flight about the A320 and again when the A320 was 25nm W of GIBSO. The A320 flight called passing FL85 and was given TI about the DHC-8. As the A320 was climbing through FL105 the crew advised that they could not make their clearance and asked for a heading for extra track miles to make their joining clearance; the crew took a L turn of 15°. The DHC-8 was now outside CAS and the crew also asked for a turn, which they did by L 15°. After the ac passed the A320 flight was given joining clearance on track SAM and the DHC-8 was transferred to Exeter. The A320 crew reported having a TCAS RA whilst the DHC-8 crew stated they didn't but they were visual with the A320.

ATSI reports that the Airprox occurred in Class G, uncontrolled airspace and was reported by the pilot of a DHC-8 in the vicinity of GIBSO at FL145. The DHC-8 was inbound Exeter from Amsterdam via SAM – GIBSO and was in contact with LAC Sector 20 (S20) on 129.425 MHz. The A320 was outbound from Exeter to Dalaman via GIBSO and was also on the S20 frequency. S20 was being

operated by a Tactical Controller (T) and Planning Controller (P). The Airprox occurred at 1612 and at this time there was no Western Radar service available for traffic into and out of Exeter: operational hours on the date of the incident were between 0630 and 1330 (UTC).

At 1557 the DHC-8 flight called S20, maintaining FL240 and routeing towards SAM. The DHC-8 was under a RCS and shortly after this, the S20(T) instructed the DHC-8 to route direct to GIBSO and descend to FL190. S20(P) issued an airways joining clearance direct to Exeter for the departing A320 in accordance with MATS Part 2 procedures: on-track GIBSO, FL160.

For Exeter departures excluding LATCC (Mil): (paragraph 2.6.4.1.2) states:

'All Exeter departures flight-planned to join the ATS route structure at GIBSO/SAM will require Exeter ATC to request a joining clearance from S20. The aircraft shall be transferred directly from Exeter to S20.

... the S20 Planner..., subject to the traffic situation, will issue a joining clearance (which will be passed to Exeter by the S20 Assistant).

... Exeter ATC will turn (the aircraft) on track GIBSO/SAM, subject all traffic.

... The aircraft will be released to LAC S20, on the notified contact frequency, when the aircraft is clear of all traffic'.

At 1603:38 the DHC-8 flight was informed that, *"...Exeter will accept you at flight level one hundred you're to be [part word] cleared to leave controlled airspace by descent"*. This was read-back correctly by the DHC-8 pilot and the Mode S SFL on the situation display was observed to change to FL100. At 1606:09 the A320 was observed to become airborne from Exeter, passing FL010 for FL050. The flight worked Exeter Approach before transfer to S20. Shortly after this at 1606:20 the DHC-8 was advised, *"...just be advised there is erm opposite direction traffic there's one just getting airborne off Exeter will be joining GIBSO at flight level one six zero"*. This was acknowledged and the TI was updated at 1608:10, *"...the er previously mentioned traffic is passing flight level four five and he's oh at two five twenty-five miles to run to GIBSO"*. At this time the DHC-8 was 12nm E of GIBSO passing FL205 in the descent to FL100.

The A320 flight called S20 at 1609:20 routeing direct to GIBSO and climbing FL160. S20(T) immediately informed the A320, *"...be advised there is opposite direction traffic is five miles to the east of GIBSO passing flight level one seven three in the descent flight level one hundred"*. The A320 pilot replied, *"Er sorry you were stepped on say again please"*. S20(T) then transmitted 1609:42, *"...traffic information there is five miles to the east of GIBSO a opposite direction traffic descending out of flight level one six seven in the drop to descend to flight level one hundred"*.

CAP493 Manual of Air Traffic Services Part 1, Section 1 Chapter 5 paragraph 1.2.2 Type of Surveillance Services states:

'Pilots must be advised if a service commences, terminates or changes when:

- a) they are operating outside controlled airspace; or
- b) they cross the boundary of controlled airspace'.

The A320 pilot reported being given a TS. The UK AIP ENR 1.1.2 Para 2 Service Principles states:

'Within Class G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.

A pilot shall determine the appropriate service for the various phases and conditions of flight and request that service from the controller/FISO. ...

Controllers will make all reasonable endeavours to provide the service that a pilot requests. However, due to finite resources or controller workload, tactical priorities may influence service availability. ...

Agreements can be established between a controller and a pilot such that the operation of an aircraft is laterally or vertically restricted beyond the core terms of the Basic Service or Traffic Service.'

CAP493 Section 1 Chapter 11 paragraph 2.7.1 Appropriate Type of Service states:

'A pilot shall determine the appropriate service for the various phases and conditions of flight and request that service from the controller. If a pilot fails to request a service, the controller should normally ask the pilot to specify the service required...'

In addition, paragraph 2.8.1 Standard Application of Service states:

'Fundamental to the provision of the UK FIS outside controlled airspace is the standard application of the services to prevent the boundaries between the services becoming confused. Agreement to provide a service and acknowledgement of that level of service by a controller and pilot respectively, establishes an accord whereby both parties will abide with the definitions of the service...'

At 1610:25 the DHC-8 left CAS 2.5nm E of GIBSO, passing FL154 in the descent.

At 1610:40 the A320 pilot reported that the ac would not make the required FL160 by GIBSO and requested a turn to increase track mileage. The S20(T) replied, "A320 c/s you can turn left er fifteen degrees". At this time the A320 was 13nm W of GIBSO passing FL106 in the climb. The DHC-8 crossed GIBSO at 1610:57, making a slight R turn towards Exeter. The S20(T) then updated the DHC-8's TI on the A320, "...the traffic is now in your one o'clock range of ten miles passing flight level one one six". At 1611:15 the DHC-8 flight replied "...er we'd like to turn left to avoid this traffic if possible". S20(T) then stated, "...you are now outside controlled airspace turn left fifteen degrees it's an information service". The DHC-8 pilot read-back, "information service turning left er fifteen degrees DHC-8 c/s er we are visual with the traffic now". S20(T)'s report indicated that a BS was being provided to both ac. The DHC-8 pilot's report stated that the service being provided was 'not advised'. The ANSPs Incident Report stated that: '... the controller was aware ... incorrect phraseology (was used)... (the controller's) intention was to provide a Traffic Service.'

At 1611:45 the distance between the ac was 3.3nm laterally and 100ft vertically, the A320 climbing through FL132 in the DHC-8's 1 o'clock and the DHC-8 descending through FL131. At this point the DHC-8's L turn is seen to commence. Vertical distance between the 2 ac increased and the lateral distance between the 2 decreased. At 1612:01, as the ac pass abeam each other 5nm W of GIBSO, the lateral distance between the 2 ac was 1.9nm with 1000ft vertical distance.

At 1612 the S20(T) informed the A320 flight, "...the traffic's passed down your right hand side you're clear to join controlled airspace on track Southampton in the climb flight level two nine zero". The A320 pilot read-back the amended clearance correctly and reported receiving a "Resolution Advisory in that er climb". S20(T) replied, "Roger you're not yet in controlled airspace". At 1612:30 the S20(T) instructed the DHC-8 flight to, "...resume own navigation for Exeter" and stated, "my radar service terminates". The DHC-8 was then transferred to Exeter Approach. The A320 entered CAS at 1613:03, 2.5nm N of GIBSO passing FL155 and later, at 1614:20, S20(T) informed the A320 flight, "radar control service".

The Airprox occurred when, further to the A320's clearance to join CAS E'bound at GIBSO FL160, the DHC-8 flight was instructed to leave CAS W'bound through GIBSO to an acceptance level of FL100. Standard procedures were followed for the A320 Exeter departure to join CAS at GIBSO. The A320 flight reported being in receipt of a TS at the time of the Airprox however, the type of service required was not stated by the A320 pilot nor requested by the S20(T) on first contact. It is likely, but unconfirmed, that the perceived TS was initially established between Exeter Approach and the A320. The provision of TI to the A320 crew on first contact with S20(T) would enhance the A320 pilot's belief that the ac continued to be subject to a TS. The crew of the A320 was operating under the belief that they were in receipt of a TS; therefore they had ultimate responsibility for collision avoidance. The DHC-8 flight was cleared to leave CAS in the descent to FL100. Whilst still within CAS, S20(T) passed the DHC-8 TI on the A320. The DHC-8 pilot did not state the service required outside CAS nor did the S20(T) controller request the type of service required. The omission of establishing an accord/contract for service provision between the ac and S20(T) was not

commensurate with the fundamental provision of flight information services outside CAS, i.e. there was a lack of standard application. The DHC-8 flight was outside CAS for approximately 1min before being informed as such and was then informed by S20(T) that it was under an 'information service'. An 'information service' is not one of the UK Flight Information Services. The DHC-8 pilot read-back 'information service' but did not challenge the controller as to what this service was. The S20(T) controller's report stated that a BS was being provided to both flights; however, the ANSP showed that the controller had intended to give a TS. This may be borne-out by the provision and updating of TI by S20(T) to both ac. The provision of TI would indicate that S20(T) considered the 2 ac to be in likely confliction. The A320 crew requested a deviation of track to the L in order to attain the required level at GIBSO and this took the A320 N of the DHC-8's track to GIBSO. However, the DHC-8's own navigation to Exeter, after GIBSO, continued to take the DHC-8 towards the A320. Both crews were visual with each other's ac and the DHC-8 crew instigated, by request, a manoeuvre to the L to avoid the A320.

The Airprox resulted from 2 conflicting clearances through GIBSO issued by the S20 controlling team. S20(T)'s TI to both flights aided the pilots' awareness of each others' ac and an avoiding manoeuvre was undertaken by the DHC-8. This Airprox highlighted a lack of standard application of the UK Flight Information Services, with particular respect to ac leaving and joining CAS. The type of service provision outside CAS was not established between the pilots and controller involved and, whilst not considered directly contributory to this Airprox, was considered to be outside the prescribed requirements for service provision as stated in CAP493 and the UK AIP.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

The discussion initially focussed on the provision of ATSOCAS to both flights in the absence of Western Radar. The NATS Advisor informed Members that from the ANSP perspective, both flights were not on clearances per se. The DHC-8 had been cleared to leave CAS by descent and had been given an acceptance level from Exeter whilst the A320 had been given a level at GIBSO to enter CAS. A CAT Member believed that normal SOPs for these CAT flights would be for the crews to seek a DS whilst within the Class G airspace portion of their flight W of GIBSO. In this case, although the level of service was not stated to the A320 flight - the crew thought they were under a TS - and an 'Information service' was offered and accepted by the DHC-8 crew, it appeared that the S20T was endeavouring to provide a TS to both flights. Both crews were responsible for requesting the level of service from the ATSU although S20T might not have been able or willing to give a DS, a secondary task to the primary task of providing RCS within CAS. A controller Member thought that Exeter would have been aware of the potential confliction and the Western Radar closure so could have provided a DS to both. That said, Exeter had transferred the A320 in accordance with the MATS Part 2 procedures, which Members believed was appropriate as the DHC-8 still within CAS and the subject ac were going to pass when very close to GIBSO. The information passed by S20T to both flights was, for all intents and purposes, the same as would have been given under a TS. Both crews' SA was enhanced by the TI given and had afforded them a reasonable time to assimilate and act on the information. Both crews saw each other's ac on TCAS; the A320 crew had requested a L turn to increase track distance for their climb and to avoid the DHC-8, whose crew also saw the potential conflict and requested a L turn. TCAS TAs were generated on both flightdecks and visual acquisition was made, the ac passing separated by 1000ft vertically and 1.9nm horizontally on parallel opposing tracks; the A320 crew received a momentary RA as they passed. Members agreed that both crews had fully discharged their responsibilities with respect to maintaining their own separation from other traffic within Class G airspace and this Airprox could be classified as a sighting report where the actions taken had removed any risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Sighting report.

Degree of Risk: C.